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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,911	01/23/2004	Lamyaa Abdel-Alle El-Gabry	143562-1	1910
23413	7590	03/01/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/707,911

Applicant(s)

EL-GABRY ET AL.

Examiner

Nguyen N. Hanh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Remarks***

1. In response to Election/Restriction requirement, Applicant's election without traverse of claims 1-17 has been acknowledged.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "layers of turn insulation" must be shown or the feature canceled from claims 4 and 14. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kilgore et al.

Regarding claim 1, Kilgore et al. disclose a generator coil (preamble, patentable weight not given) comprising: a plurality of stacked windings (82 and 84 in Fig. 8) in a rotor where individual turns (Webster's dictionary interprets "turn" as the action or an act of giving or taking different direction) are stacked in parallel sided radial slots in the rotor, each successive turn having the same width, wherein a first turn (84') has a first thickness and a second turn (82') has a second thickness thicker than said first thickness (Col. 6, lines 33-50), said second turn employed in regions of high temperature (region facing the stator coil) thereby reducing the temperature thereof.

Regarding claim 9, Kilgore et al. also disclose a dynamoelectric machine (preamble, patentable weight not given) comprising: a rotor (10 in Fig. 1) having a plurality of slots; a plurality of copper (Col. 3, lines 5-10 and Col. 4, lines 5-7) turns (82 and 84 in Fig. 8) each having a same width and stacked in each slot of said plurality of slots, wherein a first copper turn (84') of said plurality of copper turns has a first

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thickness and a second copper turn (82') of said plurality of copper turns has a second thickness thicker than said first thickness, said second copper turn is employed in regions of high temperature (region facing the stator coil) thereby reducing the temperature.

Regarding claims 2 and 12, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein said second turn (or said second copper turn as in claim 12) is employed in at least one of a region of high temperature and top turns of the rotor (Fig. 8).

Regarding claims 3 and 11, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein each turn (or said first and second copper turns as in claim 11) comprises an axial length of copper having a generally rectangular cross-sectional shape.

Regarding claims 4 and 13, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein said each slot contains layers of said individual turns comprising copper turns (or layers of copper turns as in claim 13) separated by layers of turn insulation (Fig. 8).

Regarding claims 5 and 14, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein said layers of turn insulation disposed between said first and second turns (or copper turns as in claim 15) have substantially the same thickness (Fig. 8).

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Regarding claims 6 and 15, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein a net turn thickness and number of turns are identical to that if a constant turn thickness was employed in said each slot of identical geometry.

Regarding claims 7 and 16, Kilgore et al. also disclose a generator coil (or the dynamoelectric machine) wherein at least two different turn thicknesses (82' and 84') are employed.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilgore et al.

Regarding claims 8 and 17, Kilgore et al. show all limitations of the claimed invention except showing a hot spot temperature corresponding to said region of higher temperature is reduced by about 7 degrees C from that of using constant turn thickness when a two turn thickness is employed in a corresponding parallel sided slot having eleven turns. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ two turn thickness in a corresponding parallel sided slot having eleven turns so that a hot spot temperature corresponding to said region of higher temperature is reduced by about 7 degrees C from that of using constant turn thickness, since it has been held that discovering an optimum value of a

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result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

February 18, 2005

  
DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800